

STARTUP PROCEDURES FOR THE FSR PIPER M500

Use this checklist to help with the startup of the Piper M500 using the Logitech **Switch Panel** with **SPAD.Next** and my **M500 Snippet**.

SET UP THE ENVIRONMENT FROM MAIN MENU

- Choose a suitable aerodrome to depart from, ensure you pick a parking slot, so you are cold and dark.
- Choose any liveries for the M500.
- Choose some suitable weather for your flight, few clouds would be nice.
- I recommend using headphones as the sounds for the aircraft are amazing.
- Once you are happy click Fly.
- You should now be cold and dark on your chosen parking slot at your aerodrome ready for your startup procedure.



BY ATCMR

Last updated 05 Dec 23

TIME TO START HER UP

- Run Spad.Next from the start menu.
- Choose the M500 from the profiles menu and activate it, you can now minimize Spad.Next
- You should see the Landing Gear lights on now top red and the others Green, this is a good indication that you have the correct profile running on Spad.Next
- Check Full movement of the Prop RPM and Full condition levers.

PRE START CHECKS

- All Passengers Boarded.
- Chocks/Pitot covers External equipment all stowed (Check EFB)
- Door Closed and Latched.
- All electrical Switches Off
- Climate Controls Off
- Circuit Breakers all pushed in
- ECS Cabin Comfort Off
- Parking Brake Set on (Tgl 4)
- Bleed Air Pulled and off (R)
- Power lever idle
- Condition lever cut off/feather
- Emer Switch on Check PFD then off (SW2 short then long for off)
- Nav light on.
- Battery switch on
- Flaps retract
- Fuel Check for imbalance and quantity for flight .
- OAT/Oil Temps Verify and check
- Fire DET/Ann Test press and hold verify Eng Fire CAS release
- CAS Consider any that are illuminated

ENGINE START USING BATTERY

- Battery Voltage 24-26 Volts
- Fuel Pumps to manual (On to Man / Off to Auto)
- L & R Fuel Pumps on CAS Message - Illuminated
- Ignition switch to manual (I)
- Ignition on CAS Message - illuminated
- Prop area Clear
- Start mode switch Auto (light in switch extinguished).
- Push Start switch (lift cover Push) (SW1)
- Oil Pressure check rising.
- Ng Min 13% Stabilized.
- Condition lever to Run.
- ITT Max 100% limited to 5 secs
- Starter at 56% Ng Verify starter off (CAS) if not press Man/Stop
- Ng stable above 63%
- Np verify 1200rpm Minimum
- Gen switch On (check positive amps & 28 Volts) (Master Alt)
- ALT Switch on
- Fuel Pumps switch to Auto (Fuel Pumps to Off on SP)
- Ignition Switch Off (Both/All)
- Oil Pressure check (min 60PSI)

Continued from external power start.

- Avionics Switch On
- MFD on (Press Ent bottom right soft key)
- CAS Messages consider any illuminated
- Auto Pilot Pre flight test
- PITOT Switch On check operation
- Pitot Switch Off/As required
- Taxi Lights On
- Cabin Climate controls as required
- Radios/Avionics Check
- Flaps Retracted Check
- Elevator Trim set for take off
- Rudder trim set 2-3 right trim on green mark
- Bleed Air Lever Push in (on) (Start)
- Cabin Pressure Dump switch Verify Position
- ECS Cabin Comfort switch set to Normal
- Dest Elv (LFE in TMR/REF window) Set
- Stall warning Press to Test (SW3)
- Standby Flight Instrument Verify On
- Altimeters Set
- Parking Brake Release

BEFORE TAXI PROCEDURES

- Taxi area clear
- Power Lever - Advance slowly
- Prop Rpm Min 1200rpm
- Brakes check
- Steering Check

RUNUP PROCEDURES

- Parking Brake Set
- Power Lever set to 1900rpm
- Over Speed Gov Test Switch push and hold (observe approx. Np drop 60rpm then Release)
- Power Lever to Idle
- Reverse Lock Out switch Hold (Min 5 secs)
- Power Lever Retard (confirm Beta and Reverse not available)
- GEN Switch Off (confirm Alt takes Load)
- GEN Switch On

BEFORE TAKE OFF CHECKS

- Seatbelts all fastened
- GEN switch on
- ALT Switch on
- BLEED Air Pushed in
- ECS Cabin Comfort Norm
- Fuel temp Check within limits
- Fuel Pumps switch Manual
- Ignition switch Manual
- Pitot On as required
- Ice Protection as required
- Taxi/REC light as required
- Landing Light On
- Nav Light On
- Strobe Light On
- Flight Instruments Check
- CAS/PFD Consider any warnings
- Engine Instruments Check
- Radios/Avionics/Transponder set as required
- Flaps set to 0-20
- Elevator and rudder trim set
- Flight Controls free and correct
- TO/GA press if required
- Timer and Heading Bug Start & Synch

Operating Speeds

The following Table sets out the Operating speeds for the M500

V _{mo} (Max Operating Speeds never Exceed this speed)	188		
V _o (Max maneuvering speed no abrupt turns above this speed)	127		
V _{FE} (Max Flap extension Speeds)			
10	168		
20	135		
30	118		
V _{LO} (Max Landing Gear Extension Speeds)			
Extension	168		
Retraction	129		
V _R Rotation Speed	85		
V _X best angle of climb	95		
V _Y Best rate of climb	110		
V _{Glide}	108		
V _{so} (Stall speed at max Take off weight and 0°, 30°, 45° bank)	0°	30°	45°
Clean no flaps gear up	78	84	93
Landing flaps 36° gear down	68	74	83
V _{Ref} Landing speed full flaps	85		
V _{Ref} landing speed no flaps	100		
Max Crosswind	16		

AFTER FLIGHT SHUTDOWN

- Parking Brake set Tgl4
- ECS Cabin Comfort Off
- Power Lever Idle
- Climate controls Off
- Fuel Pumps Off
- Avionics switch Off
- Gen Switch Off
- ALT Switch Off
- ITT Stabilize for 2 mins @ Idle
- Condition lever to cut off
- Bleed Air Out
- Exterior lighting Off
- Fuel remaining note
- Battery Switch Off
- Door Open for Passengers
- Wheel Chocks tie downs and covers as required

ENGINE START USING EXTERNAL POWER

- Battery switch verify Off
 - External Power Connect
 - Throttle Idle
 - Condition lever to idle
 - Fuel Pumps to manual (On to Man / Off to Auto)
 - Bleed Air Pulled and off (R)
 - Nav light on
 - Ignition switch to manual (L)
 - Prop Area clear
 - Start mode switch to auto (lights extinguished)
 - Push Start (SW1)
 - Oil pressure rising?
 - Condition lever to run @ 13%ng stabilized
 - Fuel Pumps to Auto (On to Man / Off to Auto)
 - Ignition switch Off (Both/All)
 - Battery switch On
 - External Power disconnect
 - Gen switch On
 - Alt Switch On
 - Oil Pressure check (min 60PSI)
- Continue on Battery start from**

MISCELLANEOUS BUTTONS

SW1 Start

SW2 Emergency Power

SW3 Stall warning

SW4 Folding table

SW5 Fire Det/Ann Test switch

SW6 Man/Stop Button

TGL1 Name Plates off/on

TGL2 Taxi Info on/off

TGL3 ATC on/off

TGL4 Parking Brake